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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/550,311	09/22/2005	You-Young Lee	58877-8003.US01	1757

22918   7590   04/28/2008
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EXAMINER
CHAI, LONGBIT

ART UNIT	PAPER NUMBER
2131	

MAIL DATE	DELIVERY MODE
04/28/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS,
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>22 September 2005</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-5</u> is/are pending in the application.

   4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-5</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>22 September 2005</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a)☒ All b)☐ Some * c)☐ None of:

   1.☒ Certified copies of the priority documents have been received.

   2.☐ Certified copies of the priority documents have been received in Application No. _____.

   3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
       application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO/SB/08)
     Paper No(s)/Mail Date <u>9/22/2005</u>.

4)☐ Interview Summary (PTO-413)
     Paper No(s)/Mail Date. _____

5)☐ Notice of Informal Patent Application

6)☐ Other: _____

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DETAILED ACTION

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Priority

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1.   Applicant's claim for benefit of foreign priority under 35 U.S.C. 119 (a) – (d) is

acknowledged.

    The application is filed on 9/22/2005 but has a foreign priority application filed on

3/22/2003.

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Claim Rejections - 35 USC § 101

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    35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter,
> or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and
> requirements of this title.

2.   Claims 1 – 2 are rejected under 35 U.S.C. 101 because the claim limitations are merely

directed to information units and data structure; however, what to do with the information units in

order to produce a useful result with practical usage in the real world is not recited in the claim

and as such the claims are merely directed to non-statutory subject matters and it would not be

eligible for patentability because it would be eligible for patentability if a practical application was

present that produced a <u>useful</u>, concrete and tangible result upon execution of the instructions,

according to MPEP §7.05.01.

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Claim Rejections - 35 USC § 112

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    The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the
> subject matter which the applicant regards as his invention.

3.   Claim 5 is indefinite because the claim language "a client needs to transmit an

encryption processing using the searched M_f.n combined information as a variable to create

encrypted information, and transmitting the encrypted information to the client" has

inappropriate antecedent basis for this limitation in the claim because the client is transmitting

information to itself (note: a client … the client).

Claim Rejections - 35 USC § 102

         The following is a quotation of the appropriate paragraph of 35 U.S.C. 102 that forms the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another
> filed in the United States before the invention by the applicant for patent or (2) a patent granted on an
> application for patent by another filed in the United States before the invention by the applicant for patent,
> except that an international application filed under the treaty defined in section 351(a) shall have the effects
> for purposes of this subsection of an application filed in the United States only if the international application
> designated the United States and was published under Article 21(2) of such treaty in the English language.

4.   Claims 1 – 5 are rejected under 35 U.S.C. 102(e) as being anticipated by Pare, Jr. et al.

(U.S. Patent 5,870,723).

         As per claim 1, Pare teaches a data transmission system using N-dimensional

information, wherein the N-dimensional information comprises:

         basic information unit File_f information (Pare: Column 52 Line 32 – 59: a database

schema associated with a client) comprised of at least two layer information combinations

among a top layer information T_f information (Pare: Column 52 Line 42 – 46: client / user name

/ ID is considered as a top layer information), a middle layer information M_f.n information

related to the T_f information (Pare: Column 52 Line 36 – 37: a set of N x biometric data is

considered as a middle layer information), and a bottom layer information B_f information

related to the T_f information or the M_f.n information (Pare: Column 52 Line 40: PIN (or
password) is considered as a bottom layer information);

a data structure of the N-dimensional information comprised of the File_f information
(Pare: Column 52 Line 32 – 59: a database is inherently constituted of a data structure); and

a storage for storing the data structure of the N-dimensional information (Pare: Column
47 Line 7).

As per claim 2, Pare teaches the top layer information T_f information is composed of
information that is created by a keyboard/keypad or biometric terminals comprised in a Client
system and Server System, respectively, and accessed through code information generated by
the keyboard/keypad input or through biometric information of the client acquired from the
biometric terminals (Pare: Column 52 Line 38: user biometric ID is, in general, considered as
the top layer information); wherein the middle layer information M_f.n information is composed
of n-dimensionally related middle layer information from M_f.1 information to M_f.n information,
the M_f.1 information being lower layer information related to the top layer information T_f
information (Pare: Column 52 Line 36 – 37: a set of specific N x biometric data is considered as
a middle layer information) and the M_f.n information being upper layer information of the B_f
information and M_f.n-1 information being upper layer information of the M_f.n information
(Pare: Column 52 Line 40: PIN (or password) is considered as a bottom layer information), and
used as a variable for an encryption processing based on the N-dimensional information (Pare:
Column 17 Line 28 – 51); and wherein the B_f information is composed of authentication
information the client registers to the DB of the Server System (Pare: Column 4 Line 18 – 24
and Column 52 Line 13 – 18).

As per claim 3 and 4, Pare teaches a data transmitting methods using N-dimensional information, wherein an authentication processing of Server System comprises the steps of:

randomly extracting N-dimensional T_f information to create combined information and transmitting the combined information to Client System (Pare: Figure 17, Column 4 Line 29 – 42 and Column 6 Line 33 – 46: the seller randomly selects the buyer ID to offer the proposed commercial transaction and the combined information can be (e.g.) buyer ID, seller ID and etc.);

searching lower layer information $M\_f.n$ combined information related to the transmitted T_f combined information (Pare: Column 17 Line 28 – 51: the buyer extracts its corresponding biometric-PIN block information);

applying to the authentication information registered by a client an encryption processing using the searched $M\_f.n$ combined information as a variable to create encrypted information (Pare: Column 17 Line 28 – 51 / 49 – 51); and

if the encrypted information corresponds with the authentication information from the client, authenticating the client (Pare: Column 18 Line 2 – 5: the purpose of encryption is inherently meant for authentication).

As per claim 5, the claim limitations are met as the same reasons as that set forth in the paragraph above regarding to claim 3 with the exception of the feature that the data transmitting methods as recited in the claim is conducted <u>between client systems</u> instead of <u>between a server and a client</u>. However, Examiner notes (a) the client and the server by nature are merely relative terms which (e.g.) <u>a server A of a client</u> B could be also acted as a client of another system server C and as such <u>both A and B are indeed the clients of the server C</u> (b) Pare teaches a DPC (Data Processing Center) handles financial commercial transactions and buyer registration as the central site of managing the transactions between the buyer and the remote

seller (Pare: Column 33 Line 20 – 22 / Line 65 – 66) and hence the integral system components of the buyer, the seller and DPC, as taught by Pare, may also be considered as a set of clients and servers interchangeably <u>as needed</u>.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Longbit Chai whose telephone number is 571-272-3788. The examiner can normally be reached on Monday-Friday 9:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz R. Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Longbit Chai/
Longbit Chai Ph.D.
Primary Examiner, Art Unit 2131
4/20/2008